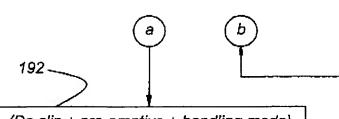
5/8 Process Input -180 184 Figure 4A 182-4 x 4 switch Νo Exit Auto? 186-Yes (Do stroke mode) Stroke the clutch for calibrateable period 188 Delta_wheel_spd 194 rear-front wheel spds throttle <= Yes 190 tp_coast and Is dc_cl<=dc_min? ABS (delta_wheel_spd.) 196 >= max allowed slip No No (fn(veh_spd))? (Do coast mode) dc_cmd= Yes fn(veh_spd)*fn(brk)*fn(slip_ctr) $Slip_ctr = 0$ (Do ISWA mode) ISWA = fn(delta_wheel_spd) 25ِ1 dc swa = fn(ISWA, veh_spd) $dc_cmd = min(dc_cmd, dc_swa).$ 252 (Output pressure) Convert dc cmd to clutch pressure and output pressure to clutch Heat protection mode 270

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(Do slip + pre-emptive + handling mode) traction

Increment slip_ctr counter

Err = delta_wheel_spd-fn(veh_spd).

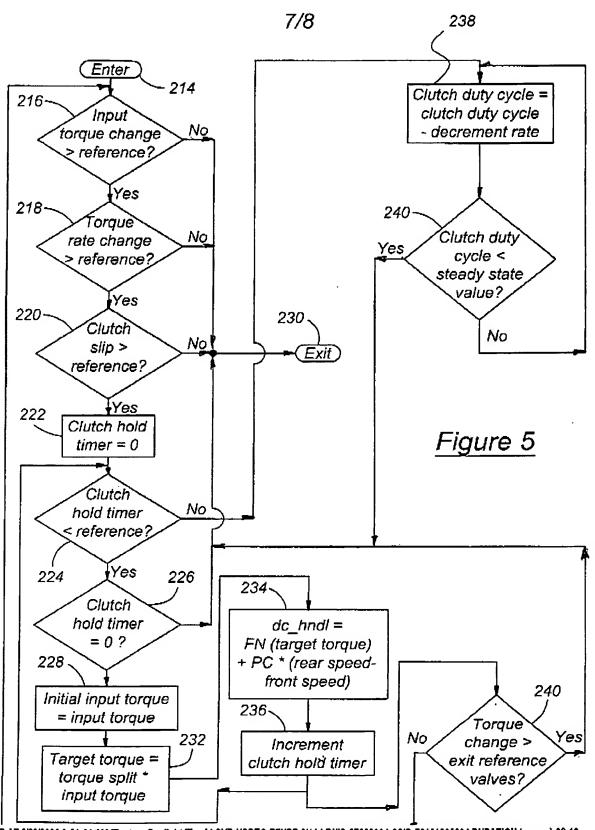
kp,ki = fn(throttle,veh_spd)n* fn(err).

kc = fn (delta_wheel_spd)

- 1. TP based pre-emptive duty cycle. dc_pps = fn(veh_spd, throttle) * fn(slip_ctr).
 - 2. Handling duty cycle.
 - 3. Pl close loop duty cycle. dc cl = (err * kp + err + ki) * kc
- 4. TP rate based pre_emptive duty cycle. dc_pre = fn(throttle.rate, veh_spd). hold dc_pre constant for a while and then decrement every loop.
- 5. Total command duty cycle.

 dc_cmd = greater of (dc_pps, dc_hndl)
 + dc_cl + dc_pre.

Figure 4B



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